

REMARKS

Claims 33-48 remain in this application. Claim 1-32 are cancelled without prejudice.

Claim Objections

Claims 1-4, 24 and 28 are objected to for reciting "GUP". In new claim 33, the term "GUP" has been replaced by "guanylurea phosphate (GUP)" for further clarity, as requested in the Office action.

Rejections under 35 U.S.C. § 112

Claims 1-23 and 30-33 are rejected under 35 U.S.C. § 112, second paragraph. Claims 1-33 have been cancelled, and new claims 34-48 have been added. The objections to the terminology and lack of antecedent basis have been addressed in the new claims herein.

Claim 35 recites that the claimed formulation "does not exhibit a titration equivalence point." Applicants respectfully submit that the addition of the term "titration" makes the claim clear. The remaining claims are also submitted to be clear in view of the amendments to the claims herein.

Rejections under 35 U.S.C. § 102(b)

Claims 1-2, 7-8, 22 and 30-31, are rejected under 35 U.S.C. § 102(b) for allegedly being anticipated by Oberley, U.S. Patent No. 4,373,010. This rejection is traversed to the extent that it is applied to the amended claims.

Oberley discloses a process for producing liquid GUP/boric acid formulations in which GUP is formed by the reaction of dicyandiamide and phosphoric acid, and the resultant GUP is reacted with boric acid. Oberley does not control the exotherm generated from the reaction, and in fact generates a substantial exotherm from the reaction of dicyandiamide and phosphoric acid. Oberley's reaction of dicyandiamide and phosphoric acid gives at most a 95% yield. (Col. 3, line 10). This is because, as demonstrated in comparative example 1 and figure 2 of the present application, the reaction described by Oberley plateaus over time, and thus cannot exceed a maximum value such as 95%. Significantly, Oberley specifically teaches away from solid

formulations by stating that if a slurry or paste is formed “they are desirably diluted to treating solutions as soon as convenient.” (Col. 2, lines 63-64).

Claim 33 is not anticipated by the disclosure of the Oberley patent because claim 33 is directed to methods of using GUP/boric acid formulations wherein the impurities are less than about 3 wt.%, and Oberley’s reaction of dicyandiamide and phosphoric acid gives at most a 95% yield. (Col. 3, line 10).

Claim 37 is not anticipated by the Oberley patent because claim 37 relates to the use of a solid GUP/boric acid formulations that have an even dispersion of GUP and boric acid, and Oberley specifically teaches away from solid formulations. (Col. 2, lines 63-64).

Claim 38 also is not anticipated by the Oberley patent because claim 38 relates to using solid formulations in the form of flowable particulates, and Oberley specifically teaches away from a solid product. (Col. 2, lines 61 et seq.)

The remainder of the 102(b) rejections of claims 17-21 are over various United States patents that disclose particulate fire retardant compositions that contain ingredients other than GUP and boric acid. Claims 17-21 have been cancelled. None of the references cited in the Office Action disclose GUP/boric acid formulations as recited in the claims, and therefore it is submitted that these rejections are moot with respect to the newly presented claims.

Rejections Under 35 U.S.C. § 103

Claims 32-33 have been rejected as obvious over Oberley et al., U.S. Patent No. 4,373,010. Claims 19-20 are rejected as obvious over Blasius, U.S. Patent No. 5,922,296. It is submitted that these rejections should be withdrawn with respect to the amended claims. There is no suggestion of the specifically claimed methods of forming composite wood products, or of the use of a GUP/boric acid formulation that has greater than 97% purity as recited in the amended claims. There would have been no motivation to use the improved formulations recited in the claims in view of the prior art cited.

Double Patenting Rejections

The Examiner has rejected pending claims under 35 U.S.C. § 101. Applicants submit that this rejection should be withdrawn in view of the amendments made to the claims, because

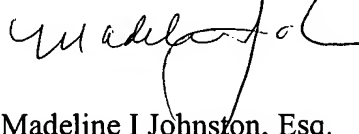
U.S. Appl. No. 10/663,504
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Reply to Office Action dated February 7, 2005

the claimed subject matter is no longer identical to the parent patent. The Examiner also has rejected claims under the non-statutory doctrine of obviousness-type double patenting over the claims of the parent patent U.S. Patent No. 6,652,633. Applicants will submit a Terminal Disclaimer upon receiving an indication of allowable subject matter.

Conclusion

Should the Examiner have any questions about the pending claims he is invited to contact the undersigned at 404-572-4720. The Commissioner is authorized to charge any additional fee or credit any overpayment associated with this submission, to Deposit Account No. 11-0980.

Respectfully submitted,



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